Public Notice

US Army Corps of Engineers

Nashville District

Public Notice No. 04-81 Date: December 28, 2004

Application No. 2002-00883 Expiration Date: January 28, 2005

Please address comments to: Nashville District Corps of Engineers, Regulatory Branch
3701 Bell Road, Nashville, TN 37214 (Attn: Lisa Morris)

JOINT PUBLIC NOTICE
US ARMY CORPS OF ENGINEERS
STATE OF TENNESSEE

SUBJECT: Proposed Deposit of Fill Material for Private Impoundment Structure on Inman Branch Mile 0.5, Williamson County, TN

TO ALL CONCERNED: The application described below has been submitted for a Department of the Army (DA) Permit pursuant to **Section 404 of the Clean Water Act** (CWA). Before a permit can be issued, certification must be provided by the state of Tennessee, Department of Environment and Conservation, (TDEC), Division of Water Pollution Control, pursuant to Section 401(a)(1) of the CWA, that applicable water quality standards will not be violated. By copy of this notice, the applicant hereby applies for the required certification.

APPLICANT: Charles Crews
PO Box 682529
Franklin, TN 37068

LOCATION: Inman Branch Mile 0.5 and an unnamed tributary to Inman Branch on Boy Scout Road, in Leipers Fork, Williamson County, TN. Inman Branch is a tributary to Arkansas Creek Mile 1.3R, which is a tributary of the South Harpeth River at Mile 15.6. The property is located on the Fairview, TN USGS Map at Lat: 35-54-42; Long: 87-03-53. See location map, Exhibit A.

DESCRIPTION OF WORK: The proposed work consists of the construction of an earthen impoundment structure. The structure would create a 57-acre reservoir that would replace approximately 6,950 feet of stream channel. The lake would be utilized primarily for personal recreational activities such as fishing, boating, and swimming, and would be made available by agreement to such groups as the Boy Scouts of America. According to the applicant, the proposed work would restore the site to its historical use as an aquatic recreational amenity and no wetlands would be affected. Work is proposed to begin in summer of 2005 to be completed by summer of 2007. The scope of work is the impoundment structure and the 57-acre lake. A more detailed description of the proposed work follows.

Under normal conditions, the perennial streams that would be affected vary in width from five to twelve feet, and generally range in depth from one to six inches, with low banks (approximately one to four feet), and flows ranging as little as less than 0.2 cubic feet per second (cfs). The stream channels are characterized by a primarily bedrock substrate with incidental occurrences of sediment. During low flow conditions, the applicant proposes to excavate approximately 400,000 cubic yards of material from the lake footprint and adjacent areas. After excavation, a fixed, constant discharge pipe would be placed into the Inman Branch channel. The pipe would provide for daily minimum flows of not less than 0.2 cfs. The discharge pipe would extend from a constant discharge port located within a drop tower structure. The constant discharge port would be located approximately 12 feet below the normal pool elevation of the lake to provide cooling and aeration of discharged water prior to release. Additional, variable discharge ports, included in the structure, could be opened and closed, if necessary, to manage flow and water quality. Approximately 155 cubic yards of fill material would be deposited on top of and around the drop tower discharge pipe to create the impoundment base. The sides of the impoundment structure would be stabilized with a combination of riprap placed atop erosion control mats, reinforced concrete, and grass. The impoundment structure would fill 12 feet wide x 600 feet long section of existing creek channel. It would be about 780 feet wide at the top (from ridge to ridge) and 130 feet at the bottom, and about 90 feet tall. The watershed above the proposed impoundment comprises approximately 377 acres of forested upland on level ridgetops with steep to moderate slopes. According to the plans, average depths of the lake would be about 20 feet, to a maximum depth of 80 feet just behind the impoundment structure. Under extreme high flow conditions, overflow would pass around the top of the dam through a 48 feet wide x 4.5 feet tall concrete spillway opening. Plans of the proposed work are attached.

On September 13, 2003, TDEC denied Mr. Crews an aquatic resource alteration permit for an impoundment at this location, which at the time was to create a 70-acre lake. Factors stated in the denial involved concerns for the elimination of stream habitat within the impounded area, water quality concerns such as adverse temperature and oxygen changes, and affects to downstream waters of special concern (the South Harpeth River). Since that time, the applicant has redesigned the proposed impoundment structure to ensure compliant maintenance of downstream water quality, provided additional ecological and hydrological data and evaluation, and would control land use activities around the lake shore. The applicant also would provide compensatory mitigation on other streams within the area as described below. Information regarding existing and predicted changes to stream biological data, watershed models, peak discharge, rainfall amounts, channel flow, physical and chemical characteristics of the stream, pH, nutrients, solids, , and fish and macroinvertebrate studies, the applicant's proposed water quality monitoring plan, and other information provided by the applicant is available for review by contacting this office.

Proposed Mitigation: The applicant proposes to restore stream attributes along a collective reach of 6,950 feet on Arkansas Creek, Inman Branch and an unnamed tributary to Arkansas Creek. The locations of these stream sections are shown on Exhibit A. These streams occupy a flat open valley that was historically used as pasture, degraded from long-term use by livestock. The applicant proposes to restore canopy along these streams by planting trees, shrubs, and grasses that are indigenous to the area. Plantings are to extend a minimum of 50 feet from either bank on the stream segments that are bordered by pastures on each side. Trees would consist of live-stake stems planted on approximately 12 foot centers and would vary by species to ensure that no single species constitutes more than 1/3 of total planting. A 75% survival rate for planted trees would be guaranteed during a 5-year monitoring period. A variety of native shrubs and grasses would also be planted to create an effective riparian zone. Livestock would be permanently restricted from access to the planted margins and the restored streams would be protected by conservation easements or restrictive covenant. In addition, the applicant proposes to preserve a minimum of 25,000 feet of streams under his ownership, in the Kelly Creek watershed. Preservation would be accomplished by placement of conservation easements or restrictive covenants to preclude development or logging within 25 feet of either bank of the designated stream reaches.

The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the work, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. In addition, the evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b)(1) of the CWA. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal.

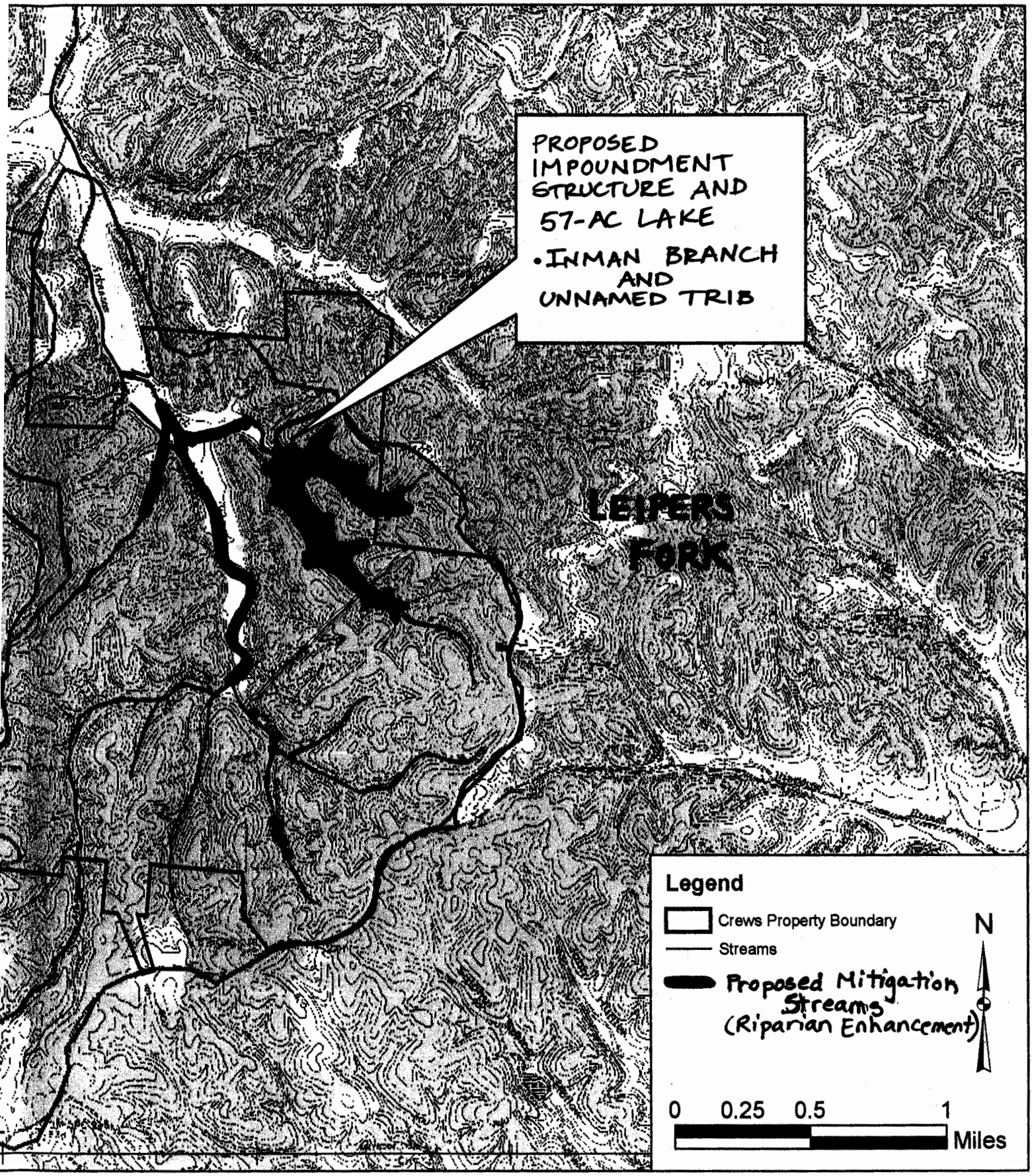
To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. An Environmental Assessment will be prepared by this office prior to a final decision concerning issuance or denial of the requested DA Permit.

Consideration of federally-listed threatened or endangered species or their critical habitats, as identified under the Endangered Species Act. The applicant's consultant has provided information to support that no federal or state listed plant or animal species would be affected by the proposed work. Based upon this and other available information, we have determined that the proposed work will not destroy or endanger any federally-listed threatened or endangered species or their critical habitats, as identified under the Endangered Species Act, and, therefore, initiation of formal consultation procedures with the U.S. Fish and Wildlife Service is not planned at this time.

Consideration of Cultural Resources. The National Register of Historic Places has been consulted and no properties listed in or eligible for the National Register are known which would be affected by the proposed work. This review constitutes the full extent of cultural resources investigations unless comment to this notice is received documenting that significant sites or properties exist which may be affected by this work, or that adequately documents that a potential exists for the location of significant sites or properties within the permit area. A copy of this notice is being sent to the office of the state historic preservation officer.

In addition to the DA permit and state water quality certification, other federal, state, and/or local approvals may be required for the proposed work. Prior to construction, the proposed impoundment structure would have to be cleared by the State of Tennessee safe dams' office.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a hearing. Written statements received in this office **on or before January 28, 2005,** will become a part of the record and will be considered in the determination. Responses and comments to this notice should be directed to the Regulatory Branch, Attn: Lisa Morris, at the above address. It is not necessary to comment separately to TDEC since copies of all comments will be sent to them and will become part of their records on the proposal. Questions regarding the water quality certification can be directed to the Tennessee Department of Environment and Conservation, Division of Water Pollution Control (Attn: Robert Baker, telephone 615-532-0710), 7th Floor, L&C Annex, 401 Church Street, Nashville, TN 37243-1534.



RTY, WILLIAMSON COUNTY, TN

FAIRVIEW TN USGS MAP

BDY Breedlove, Dennis, Young & Associates, Inc.

133 Holiday Court / Suite 210, Franklin, Tennessee 37067 Tel: 615.599.1996 Fax: 615.599.1998

EXHIBIT A
FILE NO. 2002-00883
PN 04-81 MORRIS

Proposed Dam Design

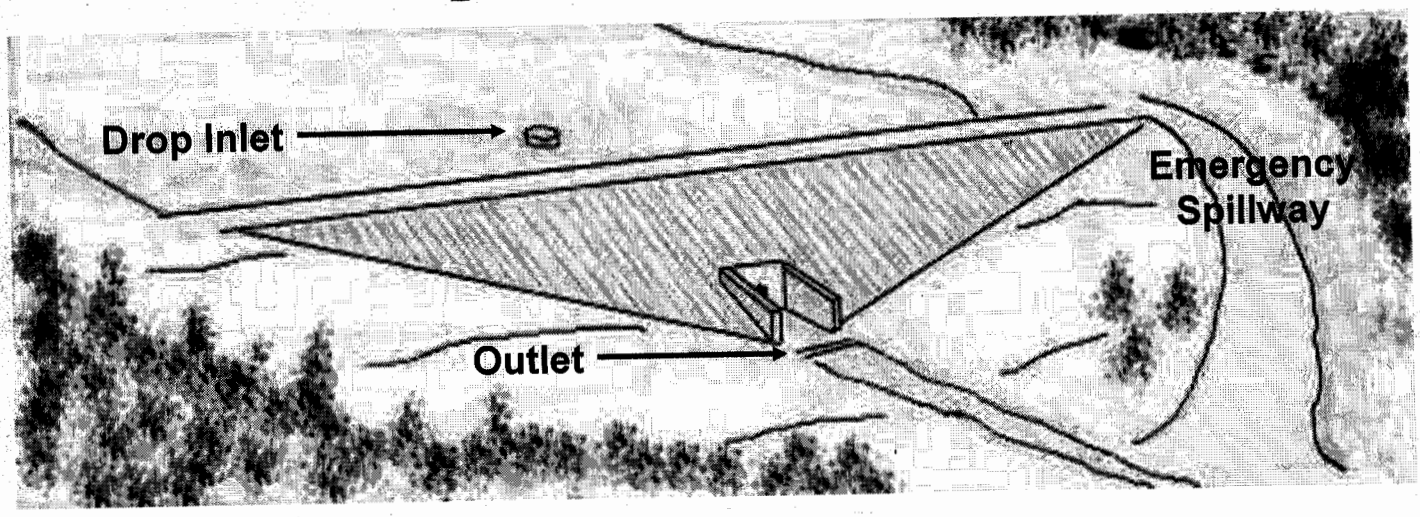


Figure 7. Rendering of proposed impoundment.

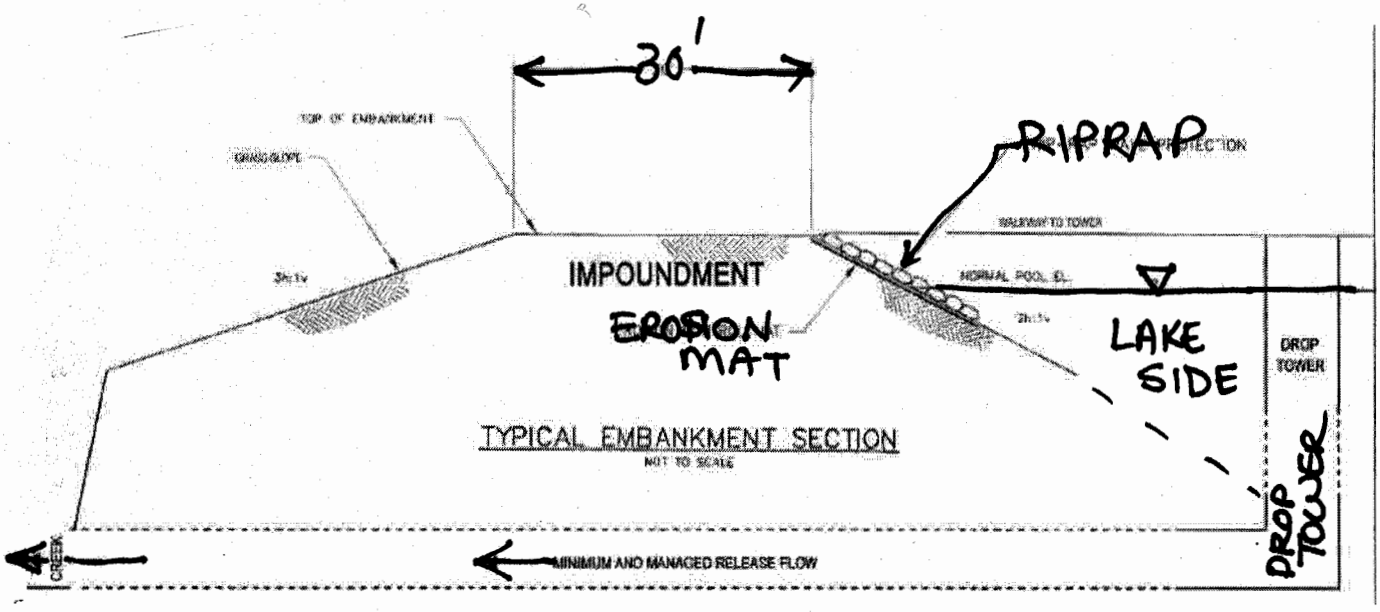


Figure 6. Example cross-section of proposed impoundment.. CROSS SECTION

EXHIBIT B
FILE NO. 2002-00883
PN 04-81 MORRIS

AERIAL VIEW OF IMPOUNDMENT (DAM) STRUCTURE

EXHIBIT C
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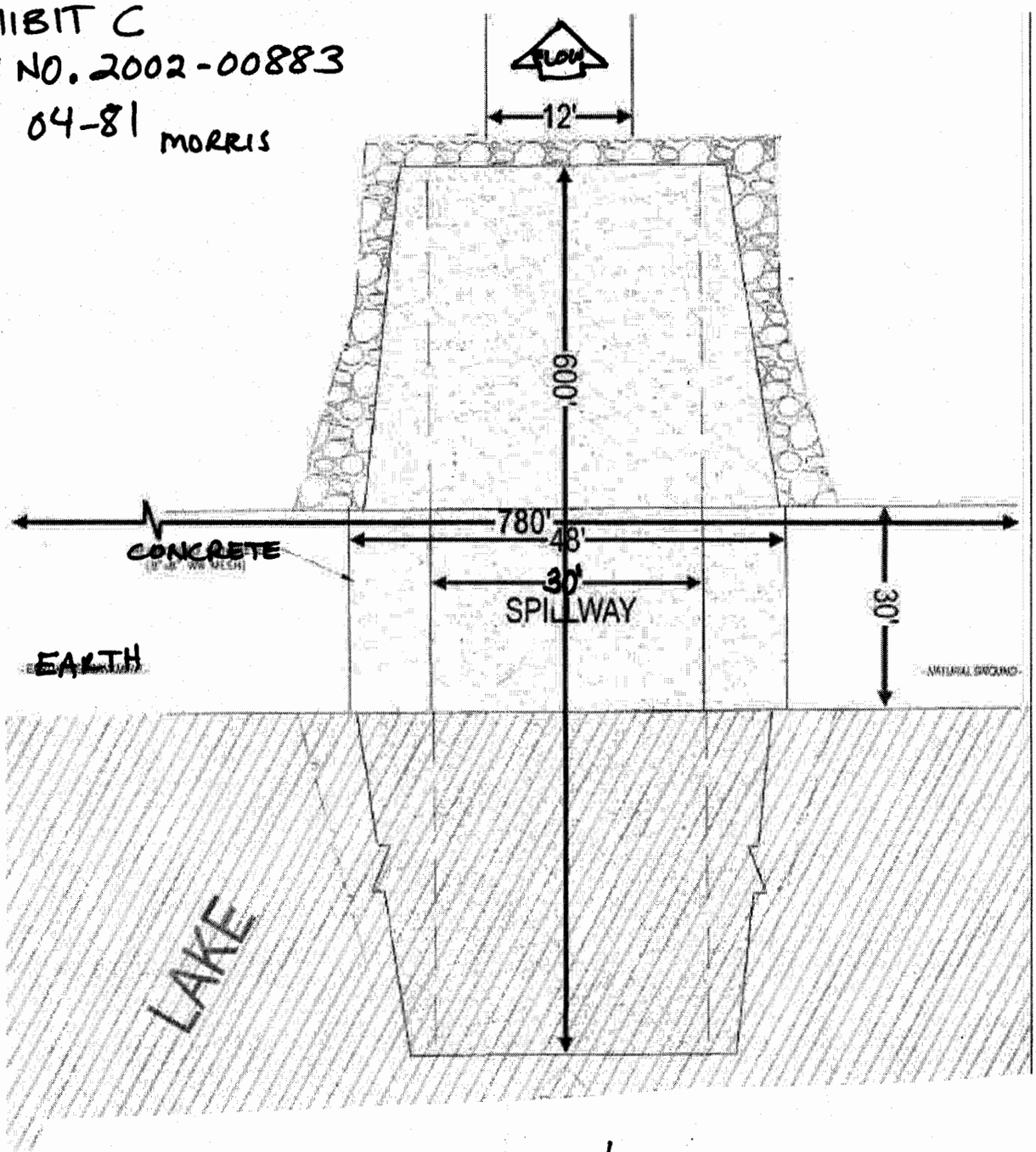

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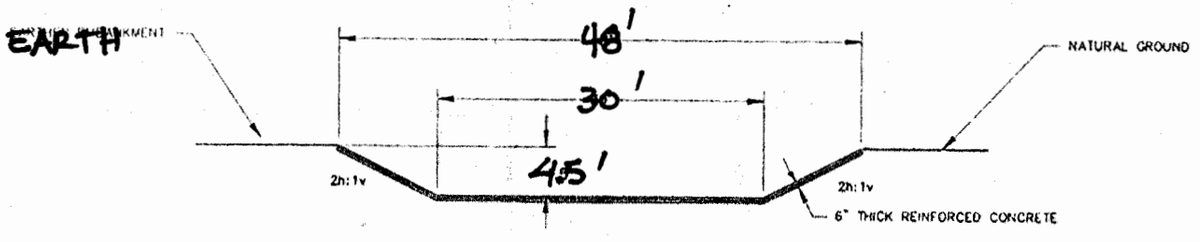

Figure 8. Proposed spillway Cross-section.

DROP TOWER

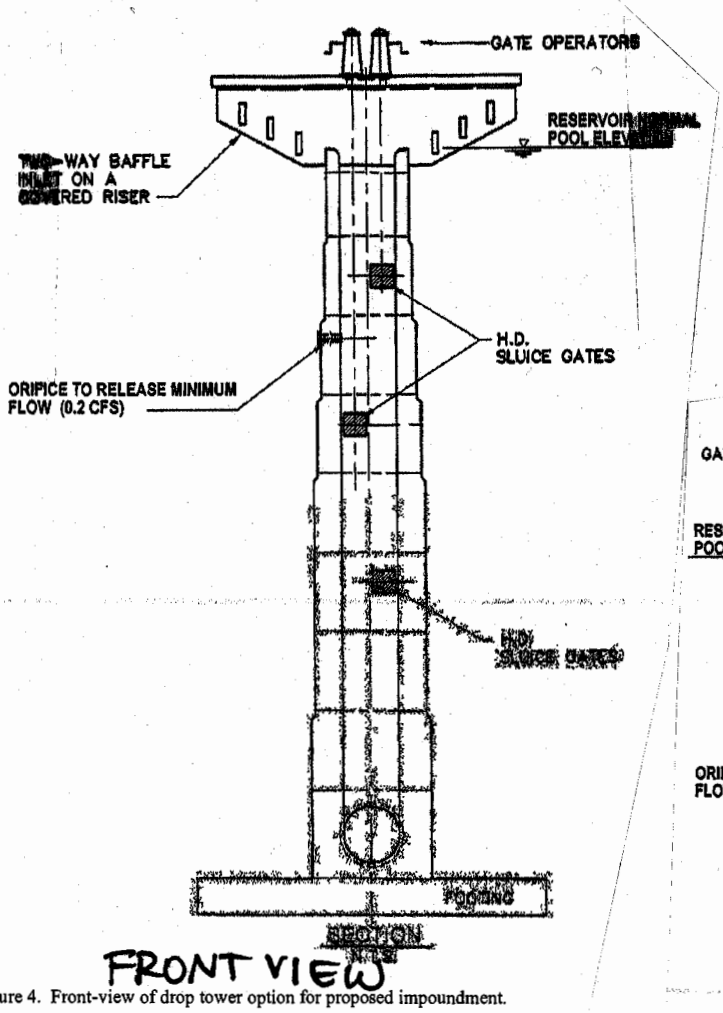

Figure 4. Front-view of drop tower option for proposed impoundment.

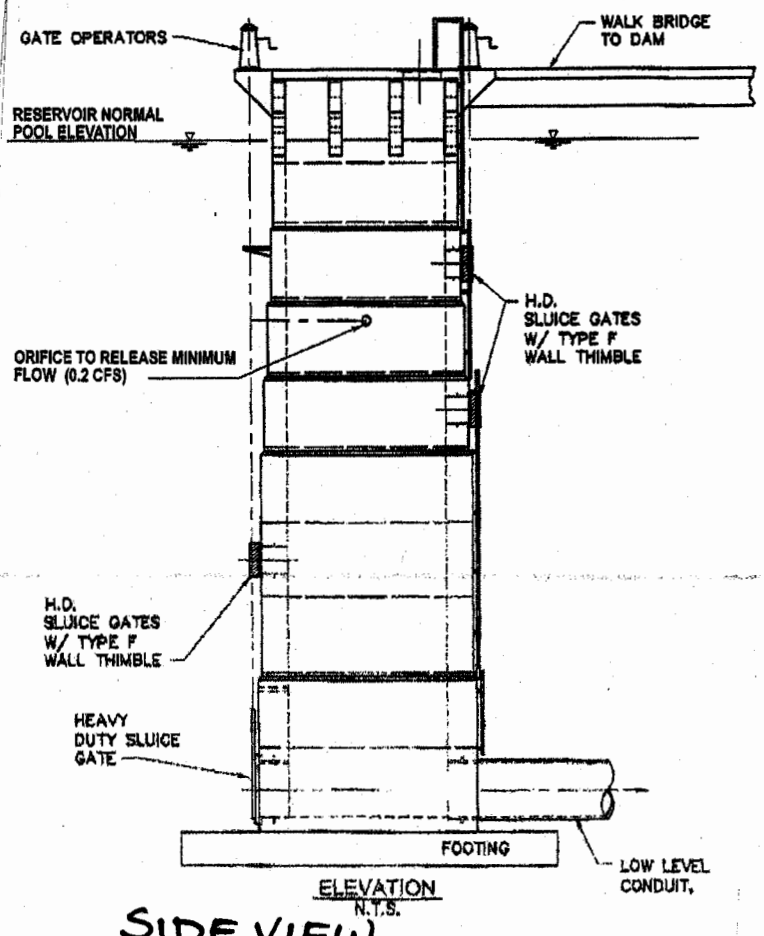

Figure 5. Side-view of drop tower option for proposed impoundment..

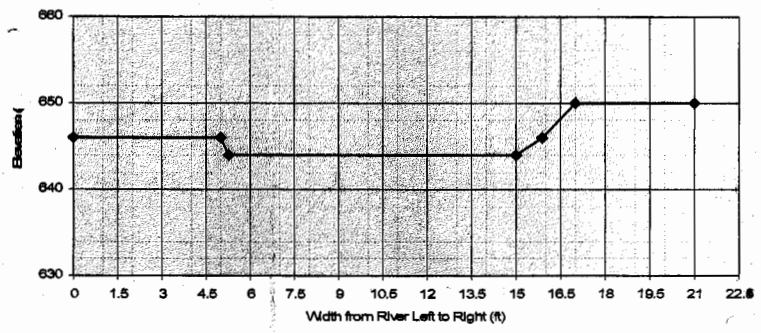

Figure 3. Approximate cross-section of Inman Branch in vicinity of proposed impoundment.

EXISTING CREEK PROFILE... BEFORE IMPOUNDMENT

EXHIBIT D
FILE NO. 2002-00883
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